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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,564	12/18/2000	Kyoko Higashino	Q61786	9907

7590 11/20/2002

SUGHRUE, MION, ZINN, MACPEAK & SEAS
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EXAMINER
CUEVAS, PEDRO J

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/737,564	HIGASHINO ET AL.	
	Examiner	Art Unit	
	Pedro J. Cuevas	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 September 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 5-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2 and 5-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *11* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,204,586 B1 to Umeda et al. in view of U.S. Patent No. 6,275,404 B1 to Shichijyo et al.

Umeda et al. clearly teaches the construction of a stator (2) for an alternator, the stator comprising:

a cylindrical stator core (32) formed circumferentially with a number of slots (35) extending axially; and

a stator winding (Figure 7) composed of a three-phase stator winding portion constructed by connecting three winding phase portions into a three-phase star connection (Column 5, lines 34-35), each of the winding phase portions being installed in the stator core by sequentially inserting strands of wire into the slots at predetermined intervals, wherein

each of the strands of wire constituting the three winding phase portions is led out from a coil end group of the stator winding to an outer side to constitute a neutral-point terminal (33*k*);

each of the neutral-point terminals (33*k*) has a flat side surface portion;

a neutral-point joint portion of the stator winding is constructed by abutting and electrically joining the flat side surface portions of the neutral-point terminals (33*k*);

the strands of wire are conducting wires having a rectangular cross section;

the neutral-point terminals (33*k*) of the strands of wire constituting the three winding phase portions comprise:

a first neutral-point terminal (Y1) positioned centrally in a circumferential direction, the first neutral-point terminal (Y1) being led axially outwards from the coil end group to constitute a neutral-point lead portion connected to the rectifier; and

second and third neutral-point terminals (X2, Z2) positioned on first and second sides in the circumferential direction, each being led axially outwards from the coil end group, then bent, and led around to the first neutral-point terminal (Y1),

wherein the side surface portions at tips of the second and third neutral-point terminals (X2, Z2) are abutted and electrically joined from the first and second sides in the circumferential direction to the side surface portions of a portion of the first neutral-point terminal (Y2) led out from the coil end group;

at least a part of the neutral-point terminals (33*k*) extending from the coil end group to the outer side is secured to the coil end group by means of an electrically-insulating resin portion (adhesive of insulation tube 333); and

the electrical joining is welding (Column 4, lines 20-21).

However, it fails to disclose:

a connecting member, which constitutes a neutral-point lead portion and composed of a conductor having flat side surface portions, is electrically connected to the rectifier;

the flat side surface portions of the neutral-point terminals and the connecting member being abutted and electrically joined to each other; and

a neutral point of the stator winding being electrically connected to a rectifier for rectifying alternating-current output.

Shichijyo et al. teach the construction of a rectifier arrangement of vehicle AC generator having:

a connecting member (Figures 10, 11, and 12), which constitutes a neutral-point lead portion and composed of a conductor (61) having flat side surface portions, is electrically connected to the rectifier (Figure 4);

the flat side surface portions of the neutral-point terminals and the connecting member being abutted and electrically joined to each other; and

a neutral point of the stator winding being electrically connected to a rectifier, for the purpose of electrically connecting the stator coils (23) neutral point to the rectifier (6).

It would have been obvious to one skilled in the art at the time the invention was made to use the rectifier arrangement disclosed by Shichijyo et al. on the stator disclosed by Umeda et al. for the purpose of electrically connect the stator coil neutral point to the rectifier.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
November 15, 2002

Thomas M. Dougherty

THOMAS M. DOUGHERTY
PRIMARY EXAMINER
GROUP ~~2800~~ 2600